

MACRO MONITOR

June 2023

Századvég

Konjunktúrakutató Zrt.

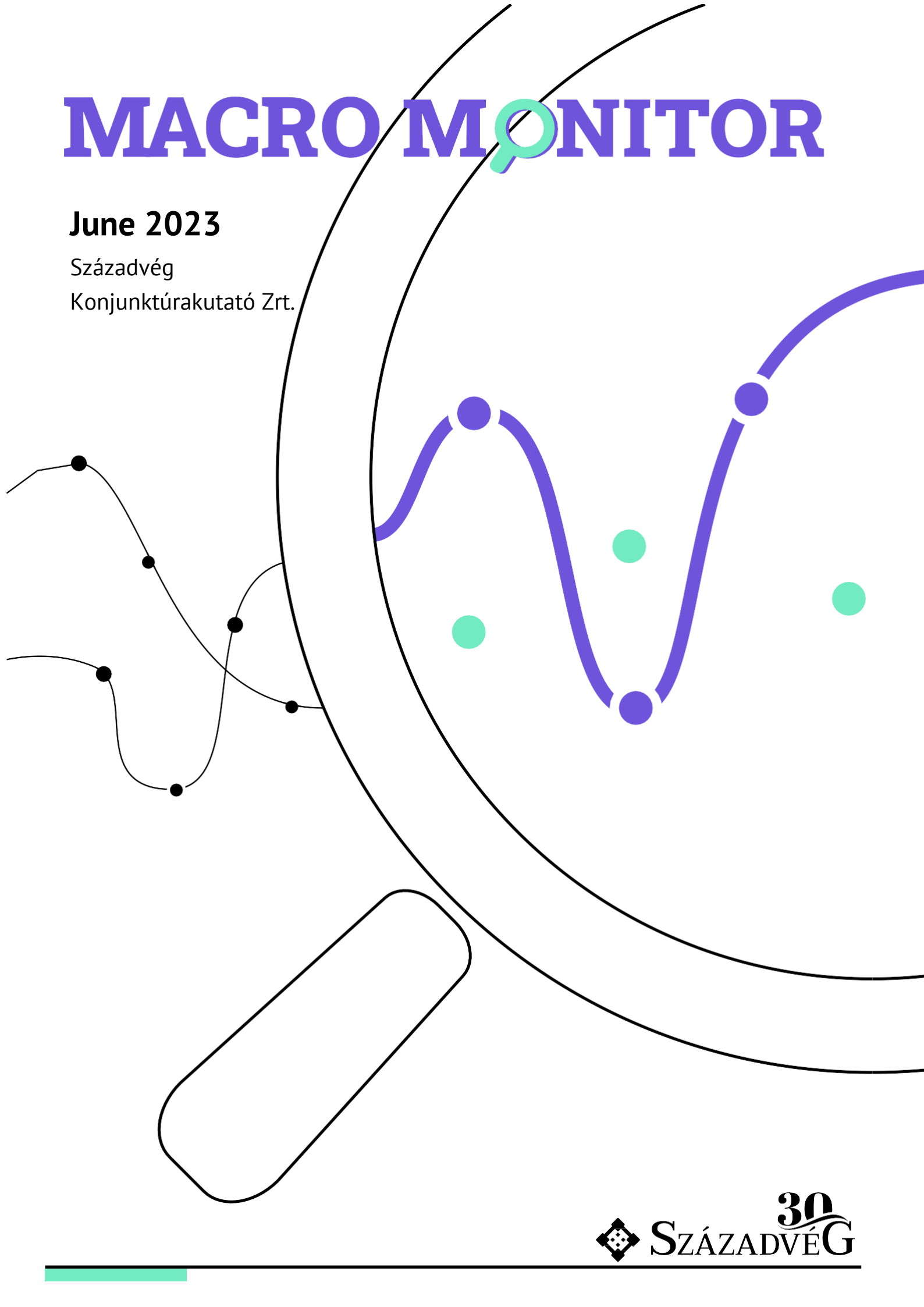


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1. Summary

IN JUNE, THE MNB LEFT THE BASE RATE UNCHANGED, BUT AGAIN CUT THE EFFECTIVE INTEREST RATE BY 100 BASIS POINTS.

In raw data terms, Hungary's Q1 2023 economic performance declined by 0.9% on an annual basis and by 0.3% on a quarterly basis.

At its meeting in June, the Monetary Council of the central bank did not change the base rate (13%) but continued to cut the policy rate. The central bank cut its effective rate, the overnight deposit facility rate, by 100 basis points to 16.0%.

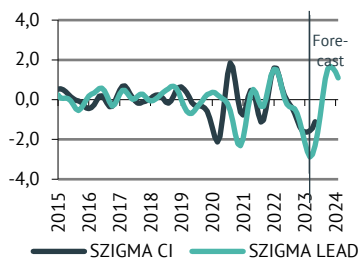
Raw data show that retail sales decreased by 13.6%, while calendar-adjusted data show that it decreased by 12.6% in April 2023, compared to the same period of the previous year. Within this, sales decreased by 8.6% in specialised and non-specialised food shops and by 10.7% in non-food shops. The turnover volume of petrol stations fell by 22.9%, exceeding the other main groups.

In June 2023, the SZIGMA CI indicator, which provides feedback on the current state of the Hungarian economy, continued to show a trend reversal in the economic growth rate, according to its value until May 2023, as the growth rate started to approach its historical trend.

The other indicator, SZIGMA LEAD, is a short-term indicator for the future of the Hungarian economy. The indicator shows a double turnaround, firstly indicating a positive stronger economic growth. Secondly, a slowdown and a significant drop in the growth rate.

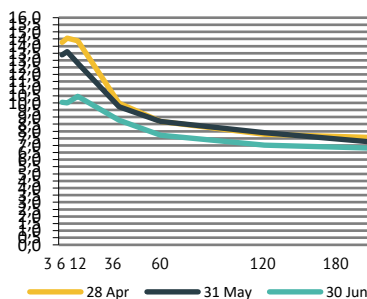
In an environment of higher interest rates and higher inflation, the trend towards a preference for premium Hungarian government bonds with above-inflation yields over those with fixed yields continued.

SIGMA indicators



Source: Századvég

Forint yield curve (%)



Source: Refinitiv

Our forecast (22.06.2023)	2023
Change in the GDP (%)	1.1
Inflation (annual average, %)	18.6
EUR/HUF (annual average)	395.0

2. Overview of the economy

2.1 External environment

Inflation in the European Union is steadily slowing.

In May 2023, the disinflationary trends that had been underway for several months continued in both the European Union (7.1%) and the euro area (6.1%).

Compared to January 2023, the inflation rate has fallen by 2.9 and 2.5 percentage points in the EU and the euro area, respectively.

Apart from Hungary (21.5%), the inflation environment is also very high in other Central and Eastern European countries. In May, consumer prices rose by 12.5% in the Czech Republic and in Poland and by 12.3% in Slovakia compared to the same period last year. In contrast, inflation has already fallen significantly in several countries: Compared to a year earlier, on average, prices of goods were 2.7% higher in Belgium, 2.9% higher in Denmark and Spain, and only 4.1% higher in Greece.

If we break down the euro area inflation into factors, we see that food price increases are also a problem here. In May, processed foods, alcoholic beverages and tobacco were on average 13.4% more expensive than a year earlier. In the recent period, inflation was heavily influenced by very high energy prices, but this trend now appears to be reversing: falling global prices have also had a positive impact on the harmonised index of consumer prices, with the price of household energy 1.8% cheaper than a year earlier.

Despite rising disinflation, the central banks in the region have not yet started monetary easing: The base rate is currently 6.75% in Poland and 7.0% in the Czech Republic. In contrast to Hungary's neighbours, the European Central Bank continued its cycle of interest rate hikes, raising the base rate in the euro area to 4% in June (with a 25 basis point increase).

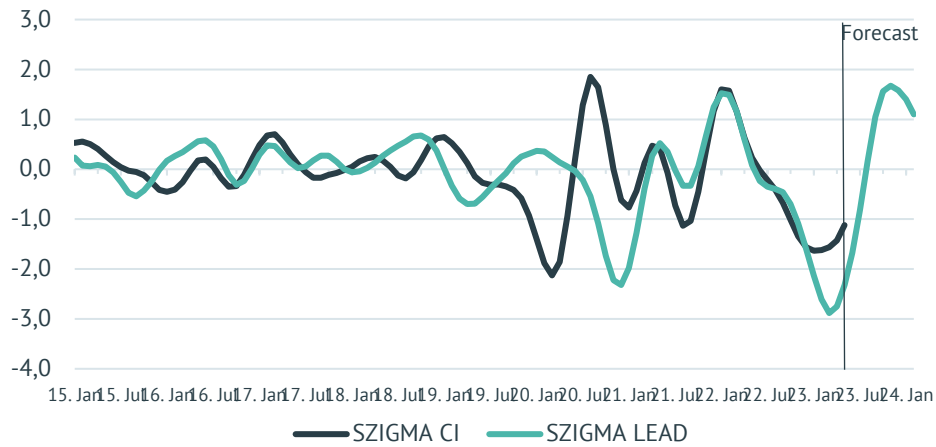
2.2 Our SZIGMA indicators

Hungarian economic growth rate is still below trend, but an improvement is expected.

In June 2023, the SZIGMA CI indicator reflecting the current state of the Hungarian economy was still in negative territory until May 2023, but it started to approach zero. This means that while the growth rate of the Hungarian economy has been below its historical trend rate, this weaker growth is gradually improving and is expected to reach its historical trend rate in the near future. The current below-trend economic growth is part of a longer period that started in June 2022 and has gradually moved further away from the historical trend each month until the beginning of this year. It then reversed and started to approach the trend value. This continues to reflect the negative effects of the unfavourable international and Hungarian economic environment (e.g. high interest rates, high inflation, etc.). In April 2023, **construction** output on a fixed basis, seasonally and working-day adjusted, continued to fall by 2.3% year on year and by 2.6% month on month. It is now below the April 2019 level. This declining performance is reflected, for one thing, in the fixed-base volume index of month-end stock of construction contracts, which declined both month on month (3.6%) and year on year (27.5%). For another thing, the monthly number of new non-residential building projects also decreased month on month (17.7%) and year on year (27.4%) in April 2023. Monthly **industrial** indicators for April 2023 show both production volume and sales volume declining year on year and month on month. In more detail: On a seasonally and working-day adjusted fixed basis, industrial output fell by 5.6% year on year and by 2.5% month on month. Fixed-base seasonally and working day adjusted total industrial sales fell by 1.2% month on month, driven by a drop in domestic sales (0.2%) and in export sales (0.9%). Year on year, fixed-base seasonally and working day adjusted total industrial sales fell by 7.8%, driven by a significant decline in domestic sales (18.6%) and a small increase in export sales (0.6%).

For June 2023, our short-term leading indicator, the SZIGMA LEAD indicator, forecasts changes in the growth rate of the Hungarian economy. First, a positive trend reversal is expected in August 2023, when the Hungarian growth rate will reach its historical trend. It will surpass this in the coming months, meaning that the growth rate of the Hungarian economy will strengthen further. Second, the SZIGMA LEAD indicator also indicates a negative turn. Namely, it indicates a reversal in the growth rate. This is expected to happen early next year, at which point the strengthening of the growth rate will come to a halt and start to weaken. Although the economy will still be growing above its historical trend rate, if there is no change, it will return to below-trend growth. **In summary:** Our forecast continues to point to positive and stronger economic growth in the near term, which could stall and slow down early next year. Looking further ahead, **industrial output** could continue to decline, as the fixed-base (total) *new industrial orders* continued to contract in April 2023, both month on month (22.3%) and year on year (9.8%). Within new industrial orders, both export sales orders and domestic sales orders continued to fall, both month on month and year on year. New industrial export sales orders fell by 23.3% month on month and by 8.5% year on year. New domestic industrial sales orders fell by 16.2% month on month and by 16.9% year on year. In May 2023, the Ifo Business Climate Index, which **measures the change in business sentiment in the German economy**, deteriorated from 93.4 index points to 91.5 index points, the first decline after six months of improvement. German businesses are more pessimistic about their future prospects. **Eurostat's** consumer confidence index fell sharply from -32.8 index points in the previous month to -36.5 index points in May 2023. The indicator weakened by 3.7 index points month on month and by 9.1 index points year on year. Improvement requires the restoration of consumer confidence.

FIGURE 1: CURRENT (CI) AND FORECASTING (LEAD) SZIGMA INDICATORS



Source: Századvég

2.3 The real economy

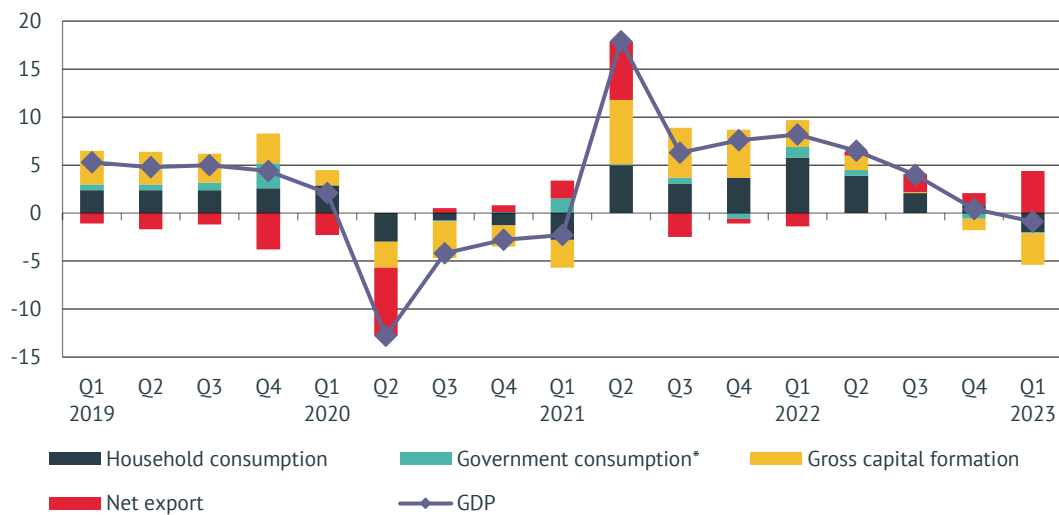
Hungarian GDP contracted by 0.3% quarter on quarter.

According to the detailed second estimate of the Hungarian Central Statistical Office (KSH) for Q1 2023, the gross domestic product (GDP) decreased by 0.9% in raw data terms and by 1.1% in terms of seasonally and calendar-adjusted data. There was also a decline on a quarterly basis. GDP contracted by 0.3% quarter on quarter.

On the **production** side: The 0.9% year-on-year contraction in Q1 2023 in raw data terms was dampened by the performance of services and agriculture, while the decline in industrial and construction output aggravated it. Consequently, industrial output contributed -0.9 percentage point, construction -0.3 percentage point, agriculture 0.5 percentage point, services 0.7 percentage point and the balance of taxes on products 1.0 percentage point to GDP in Q1 2023. Compared to the same period of the previous year, industrial output fell by 3.2% (manufacturing by 1.5%) and construction output fell by 8.6%. At the same time, agricultural output grew by 20.2%, while total services output increased by 1.1%.

On the **consumption** side, annual GDP growth in Q1 2023 was held back by consumption and accumulation, while the foreign trade balance (net balance) strengthened it. As a result, final consumption (households and community) contributed -2.1 percentage points, gross accumulation -3.3 percentage points and the foreign trade balance 4.4 percentage points to the GDP growth rate in Q1 2023. Household final consumption expenditure fell by 3.9%, the volume of collective consumption by 4.6% and the volume of gross fixed capital formation by 6.0% year on year. Consequently, domestic consumption, which includes consumption and accumulation, fell by 4.9% in Q1 2023 compared to the same period of the previous year. Compared to the same period of the previous year, the 6.6% increase in exports exceeded the 1.9% increase in imports. The majority of foreign trade (nearly 85%) was in goods, where exports grew by 7.0% and imports by 1.7% compared to the same period last year. Exports of services, including tourism, grew by 3.9% and imports by 1.8%.

**FIGURE 2: CONTRIBUTION TO ANNUAL GDP GROWTH
(CONSUMPTION SIDE, %)**



**Including social benefits in kind.*

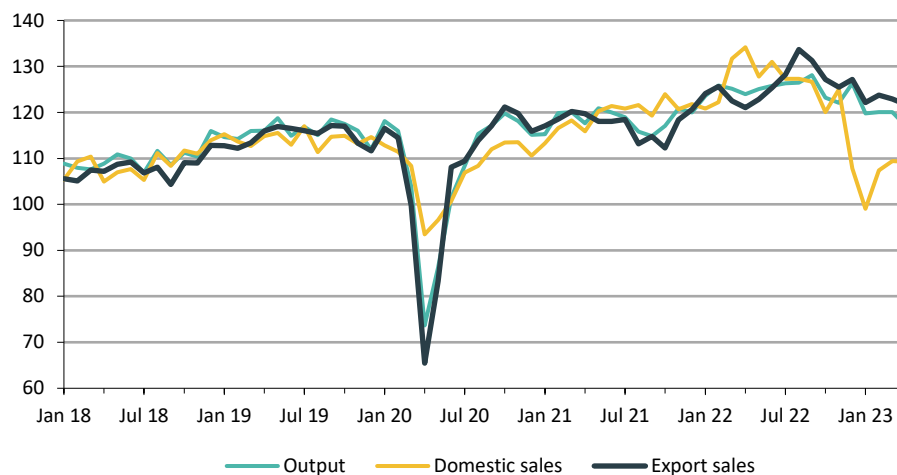
Source: Hungarian Central Statistical Office

Industrial production is falling further.

Compared with the same period of the previous year, industrial production fell by 8.3% year on year according to raw data and by 5.8% according to working-day adjusted data in April 2023.

Compared with the previous month, seasonally and working-day adjusted industrial production fell by 2.5%. Industrial sales also fell year on year in April 2023. Compared to the same period of the previous year, industrial (total) sales fell by 10.5% year on year. This was mainly due to domestic sales, which fell by 20.1%. However, export sales also saw a smaller decline of 2.5%.

FIGURE 3: CHANGES IN INDUSTRIAL OUTPUT AND SALES
(2015 MONTHLY AVERAGE = 100%)



Remark: Seasonally and calendar adjusted indices.

Source: Hungarian Central Statistical Office, Századvég

Returning to industrial production, in April 2023, manufacturing continued to account for the largest share (94.8%) of industrial production among the three industrial sectors, with output falling by 7.3% year on year. Of the remaining share, the energy sector (electricity, gas and steam supply and air conditioning) contributed 4.8% and mining and quarrying 0.4% to industrial production in April 2023. Volumes in all three sectors fell year on year. Output in manufacturing, which accounts for 94.8% of the total, fell by 7.3%, while energy, which accounts for 4.8%, declined by 23.6% and mining and quarrying, which accounts for 0.4%, fell by 31.0%.

Within manufacturing, output fell in all but two sectors (electrical equipment manufacturing and automotive manufacturing). The largest contributor to the manufacturing sector's April 2023 output (25.2%) continued to be the automotive sector, where output grew by 10.5% year on year. In terms of contribution to manufacturing output, automotive manufacturing is followed by two sectors with a weight of 11.9%, one of which increased and the other decreased its annual output. While electrical equipment manufacturing increased its output by 17.8%, food processing's output fell by 20.1%.

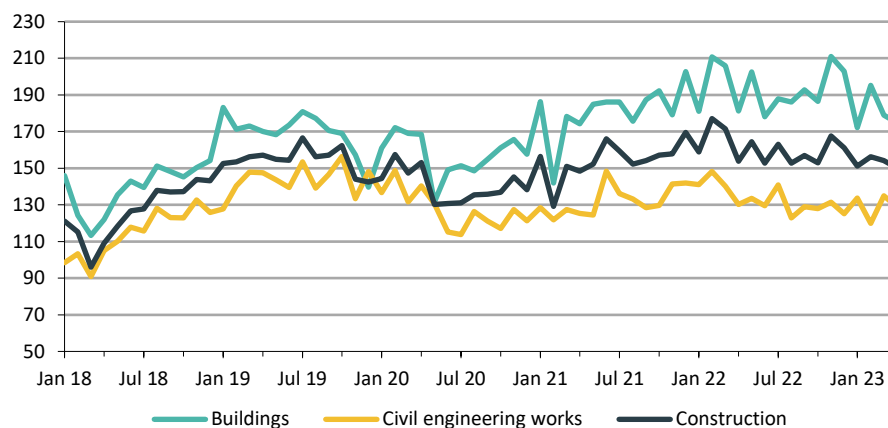
In April 2023, total new sales orders of the manufacturing industries monitored by the HCSO increased by 6.2% year on year at comparable prices. This was driven by a 6.2% increase in export sales orders and a 5.1% increase in domestic sales orders. For exports, despite the high base, export sales orders increased year on year in three sectors: pharmaceutical production (up 150.3%), computer, electronic and optical products manufacturing (up 16.3%) and automotive manufacturing (up 4.0%). In terms of domestic sales orders, despite the high year-on-year base, pharmaceutical production increased by 175.7% and electrical equipment manufacturing increased by 38.1%. Domestic sales orders fell in all sectors except the metals industry. In the metals industry, domestic sales orders increased by 25.7% year on year.

In April 2023, new sales orders in the key manufacturing industries fell by 9.8% year on year at comparable prices, driven by a decline in both new exports and new domestic sales orders. Compared to the same period last year, the volume of new export sales orders fell by 8.5% and the volume of new domestic sales orders by 16.9%. For new domestic sales orders, compared to the same period last year, pharmaceutical products (up 10.5%), electrical equipment (up 10.9%) and computer, electronic and optical products (up 4.4%) increased, while new domestic sales orders decreased in the other sectors. New export sales orders increased year on year in electrical equipment manufacturing (23.0%), pharmaceutical production (7.1%) and paper products (2.1%). The other sectors showed a decrease compared to the same period of the previous year.

The construction sector continues to

Construction output fell by 3.2% year on year in April 2023, according to raw data. In construction, buildings fell by 4.4% and civil engineering works by 1.3%. Seasonally and working day adjusted construction output decreased by 2.6% month on month (March 2023). In April 2023, both end-of-month stock of contracts and new contracts signed in the month under review decreased on an annual basis. Both main construction groups were affected. Compared to the same period of the previous year, the stock of construction contracts at the end of April 2023 was down by 27.5%, with a 4.3% decrease in buildings and a 41.2% decrease in civil engineering works.

FIGURE 4: CHANGES IN THE CONSTRUCTION INDUSTRY (MONTHLY AVERAGE FOR THE YEAR 2015 = 100%)

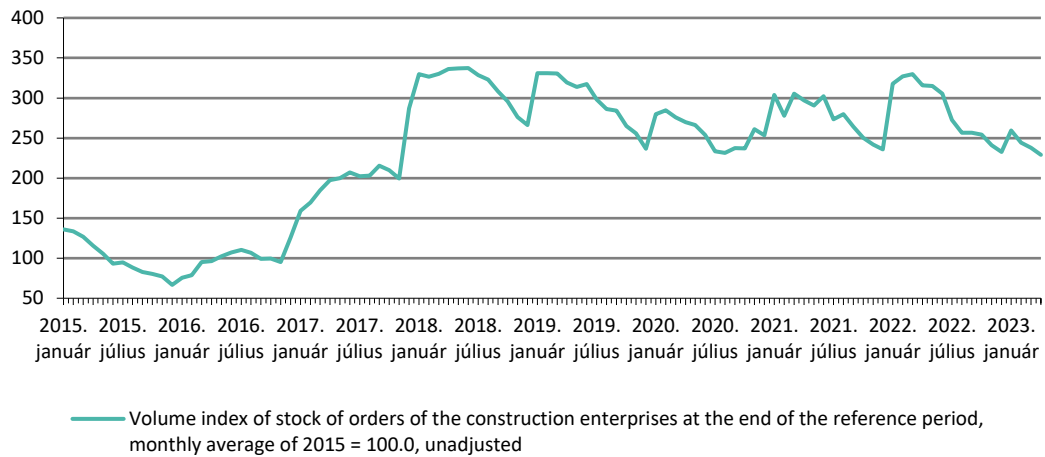


Remark: Seasonally and calendar adjusted indices.

Source: Hungarian Central Statistical Office, Századvég

Future prospects are not favourable either, as the stock of new construction contracts signed in the month under review fell by 37.5% year on year, with a decline of 33.0% for buildings and 42.3% for civil engineering works. Looking over a longer time horizon, the volume of construction contracts at the end of the month under review is currently still higher than in 2017.

FIGURE 5: CHANGES IN MONTH-END CONSTRUCTION CONTRACTS
(MONTHLY AVERAGE FOR 2015 = 100%)



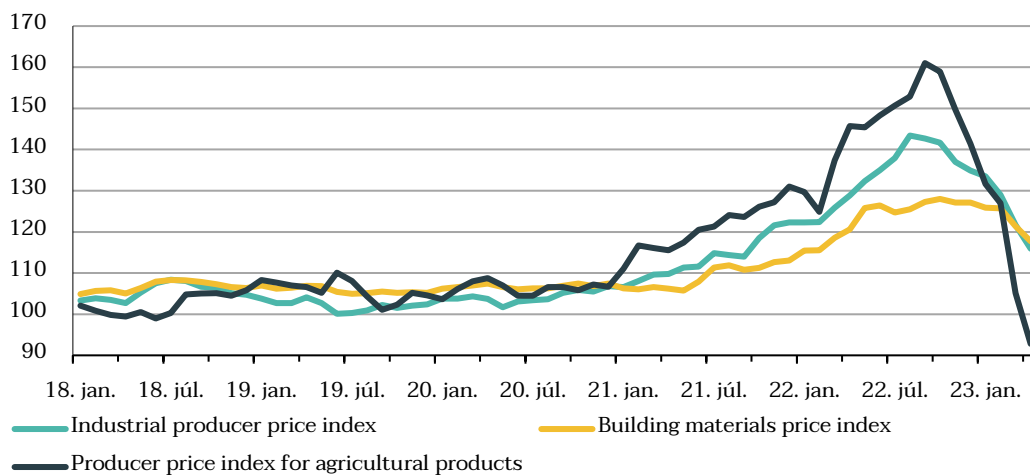
Source: Hungarian Central Statistical Office, Századvég

Agricultural producer prices fell sharply.

In April 2023, the growth rates of all three price indices examined (industrial producer price index, construction materials price index, agricultural producer price index) fell significantly. Moreover, **agricultural** producer prices have fallen. Agricultural producer prices fell by 7.2% year on year in April 2023, following a year-on-year increase of 5.1% in March 2023. The exceptionally high base played a role in this, with agricultural producer prices rising by 45-61% year on year between April and September 2022 due to the exceptional drought. However, it shows a mixed picture, because while producer prices of cereals, industrial crops (including oilseeds), crops and horticultural products fell sharply, producer prices of vegetables, potatoes, fruit, livestock and animal products increased on an annual basis. However, a downward trend, i.e. a slowdown in the growth rate, can be observed for vegetables, livestock and animal products. In April 2023, **industrial** producer prices rose by 15.9% year on year. While this is still high, it is 5.8 percentage points lower than the annual increase recorded in the previous month. The annual increase in industrial producer prices was driven by a 41.9% increase in domestic sales prices and a 3.3% increase in export sales prices. Industrial producer prices fell by 2.0% month-on-month in April 2023. This was driven by a 0.5% fall

in domestic sales prices and a 2.7% fall in export sales prices. **In construction**, building materials prices are slowly declining, supported by a gradual slowdown in construction output. In April 2023, compared to the same period of the previous year, building materials prices increased by 17.7%.

FIGURE 6: INDUSTRIAL PRODUCER PRICE INDEX, CONSTRUCTION INPUT PRICE INDEX, AGRICULTURAL PRODUCER PRICE INDEX (SAME PERIOD OF PREVIOUS YEAR = 100%)



Source: Hungarian Central Statistical Office, Századvég

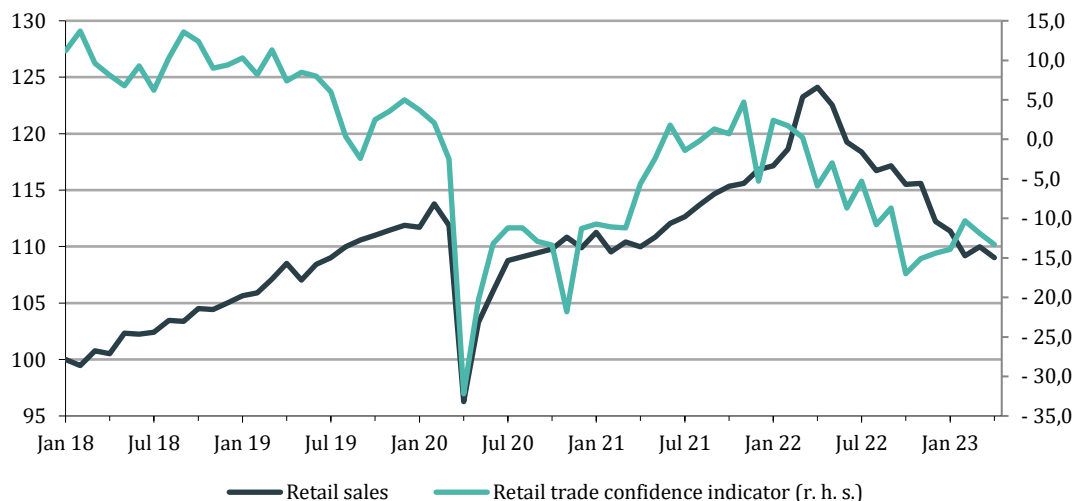
Retail sales contracted by 12.6%.

Raw data show that retail sales decreased by 13.6%, while calendar-adjusted data show that it decreased by 12.6% in April 2023, compared to the same period of the previous year. The significant decline in retail sales is due to the record high inflationary environment: people are forced to rationalise consumption even for basic goods, and their disposable income is also decreasing significantly, in addition to basic spending. The phasing out of the fuel price cap is having a similar negative impact on retail sales, with higher fuel prices also having a significant impact on results, in addition to the very high base from last year's capped prices. Increasingly strong retail promotions and falling fuel selling prices should support a rebound in sales in the coming period.

In April 2023, turnover in specialised and non-specialised food shops decreased by 8.6%, while turnover in non-food shops also decreased by 10.7%. In April, retail fuel sales fell sharply by 22.9% year on year, reflecting the base effect and higher-than-administered prices. Despite the year-on-year decline in turnover, a positive trend is already visible on a month-on-month basis, with a 0.9% increase in sales volumes compared to March, which can be attributed to slowly but still declining retail prices.

On a calendar-adjusted basis, food, beverages and tobacco declined by 4.1%, while foodstuffs fell by an even larger 10.0%. In non-food retailing, sales of parcel delivery and web shops fell by 8.4%, furniture and electric goods by 19.5% and computer and other manufactured goods by 13.4% compared to the same period last year. In contrast, the biggest sales increase (4.6%) was in pharmaceuticals and medicinal products. In addition, perfume sales also increased (2.6%). If we look at retail sales excluding the volume of fuel sales, we see that, on an annual basis, there was a 9.9% decline in the month.

**FIGURE 7: RETAIL SALES AND RETAIL CONFIDENCE INDEX
(JANUARY 2018 = 100%)**



Remark: Seasonally and calendar adjusted indices.

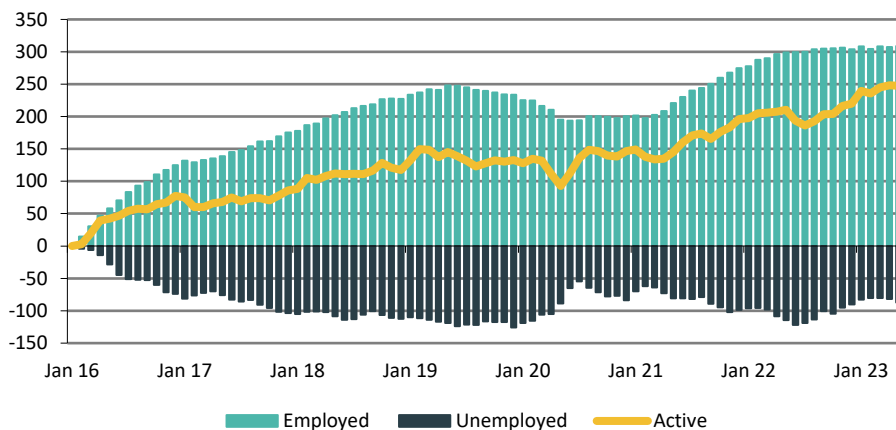
Source: Hungarian Central Statistical Office, Eurostat, Századvég

Unemployment rate at 4.0% in May.

In May 2023¹, the seasonally adjusted activity rate of the population aged 15-74 was 67.2% (4,914,000 persons), which means a labour market growth of 37,000 compared to the same period of the last year. In the period under review, the seasonally adjusted number of employees was around 4,722,000, an increase of 19,000 and 10,200 respectively compared to the previous quarter and the same period of the previous year. The rise in unemployment observed in previous months came to a halt, with 192,100 people unemployed, an increase of 26,900 compared to the same period last year.

In April, the seasonally adjusted number of employees increased by 100 from March, while it increased by 8,600 compared to the same period of the previous year. The most significant increase in the number of employees was in the competitive sector, with 22,600 more working in enterprises having at least 5 employees compared to April 2022, up by 1,800 compared to March 2023. The number of employees in the non-profit sector and the public sector did not change significantly.

FIGURE 8: CHANGES IN THE LABOUR MARKET (JANUARY 2016 = 0, THOUSAND EMPLOYEES)



Remark: Seasonally and calendar-adjusted indices

Source: Hungarian Central Statistical Office, Századvég

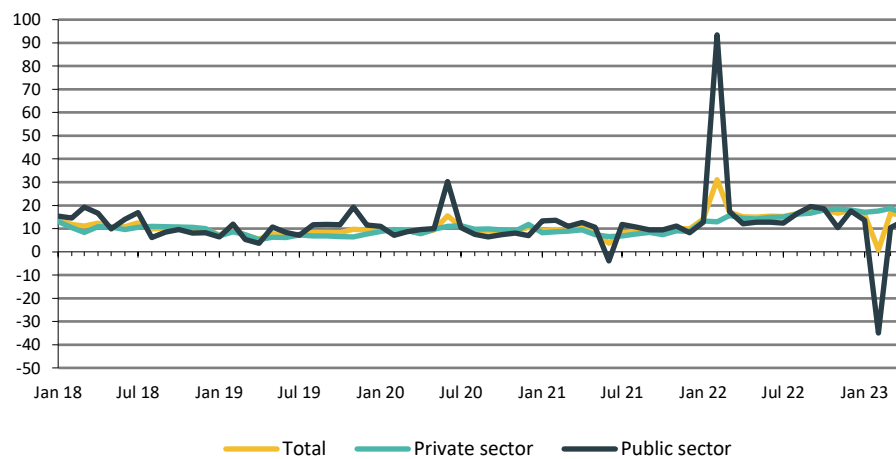
¹ Three-month moving average

Real wages continued to fall in April.

In April, the average gross monthly wage in the national economy was HUF 568,300, up 15.5% compared to the same period last year.

The highest average gross monthly wage was recorded in the competitive sector, at HUF 585,300. The average net monthly wage including benefits was HUF 391,700, an annual increase of 15.4%. The average regular gross monthly wage, excluding bonuses, rewards and one-off benefits, increased by 16.9% in April 2023 compared to a year earlier, to an estimated HUF 523,400. Inflation, which is still exceptionally high at 24.0% in April, caused real earnings to fall by 6.9%. The median gross monthly wage was HUF 442,700.

FIGURE 9: CHANGES IN GROSS WAGES (ANNUAL CHANGE, %)



Remark: Seasonally and calendar-adjusted indices

Source: Hungarian Central Statistical Office, Századvég

2.4 External balance

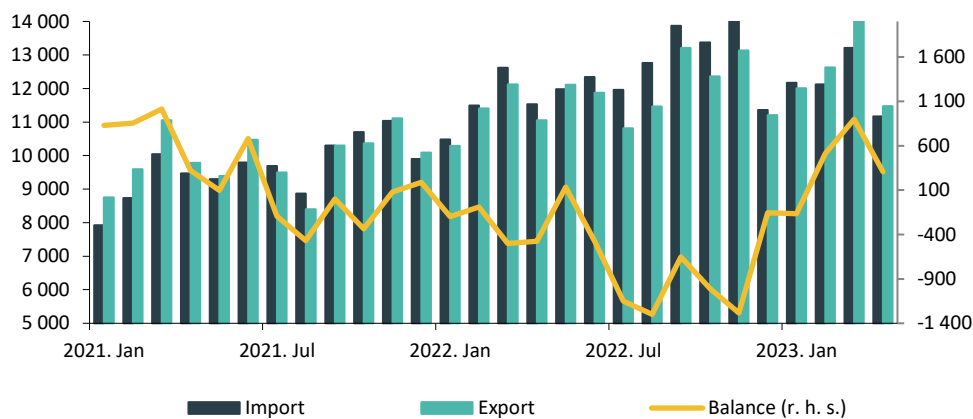
In March, the volume of exports of goods increased by 10.0% and imports by 1.6% year on year. This brought the foreign trade balance to a surplus of EUR 886.0 million, an improvement of EUR 1.7 billion compared to the previous year.

In March, the import volume of food products, beverages and tobacco increased by 5.1%, and their export volume decreased by 5.9% year on year. As for energy carriers, imports decreased by 5.6% and exports by 27.0%. As for processed products, imports decreased by 3.4%, and exports by 3.5% year on year. As for machinery and transport equipment, imports increased by 7.6%, and exports by 25.0%.

The foreign trade balance improved.

In April 2023, the EUR value of exports was 3.4% lower and the EUR value of imports was 4.0% lower than a year earlier. This brought the foreign trade surplus in goods to EUR 308 million, which is EUR 836.3 million better than a year earlier.

FIGURE 10: FOREIGN TRADE BALANCE (EUR MILLION)



Remark: The April 2023 figures are from the first estimate.

Source: Hungarian Central Statistical Office, Századvég

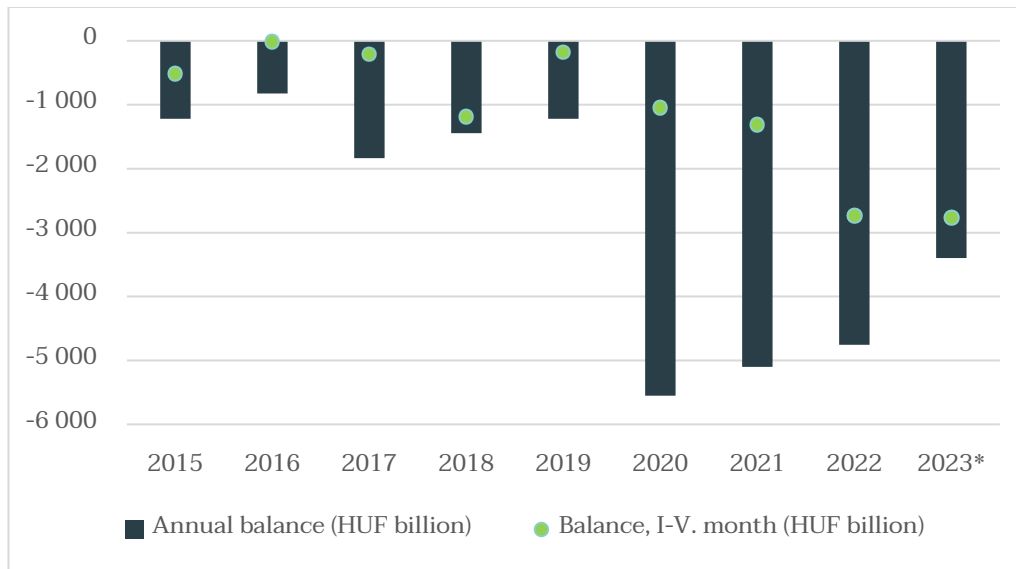
2.5 Fiscal outlook

Fiscal revenues grew by 18% and expenditure by 15% in the first five months, but lower-than-expected VAT receipts and higher-than-planned increases in interest payments on sovereign debt are already threatening the annual deficit target.

By the end of May 2023, the central budgetary subsystem had accumulated a deficit of HUF 2,763.3 billion, which is 81.3% of the annual deficit target. This deficit consisted of the HUF 2,752.4 billion deficit of the

central budget, the HUF 67.3 billion deficit of social security funds and the HUF 56.5 billion surplus of extra-budgetary funds.

FIGURE 11: CHANGES IN THE FIRST FIVE MONTHS OF THE CENTRAL SUBSYSTEM BALANCE IN RECENT YEARS (HUF BILLION)



Source: Ministry of Finance, Hungarian State Treasury; *compared to the actual deficit in 2015-2022 and the planned deficit in 2023.

Central government revenue in the first five months of the year was 17.9% higher than in the same period of the previous year.

Payments from business organisations were 43.2% higher than in the same period of 2022. Within payments by business entities, the largest revenue earner, corporate tax, was 32.4% (HUF 149 billion) higher than in the first five months of the previous year. Mining royalties and energy sector payments increased significantly by HUF 64 billion and HUF 175.8 billion respectively compared to the same period last year, with the latter two items being driven by the introduction of special taxes in 2022.

Revenues from consumption-related taxes were 7.3% (HUF 239.8 billion) higher than a year earlier. VAT receipts were HUF 65.2 billion (2.5%) higher than at the end of May last year, but this also means that VAT receipts in May were already lower than in May 2022. Excise tax revenue was HUF 48.3 billion (10.1%) more than in the first five months of 2022.

Tobacco products had the strongest increase (HUF 37.7 billion), while fuel-related revenues decreased by HUF 1 billion.

Personal income tax revenues increased by HUF 866.4 billion compared to January-May 2022. The increase is mainly attributable to the low base caused by family tax rebates last year and, to a lesser extent, to wage increases. Receipts from social contribution tax and social insurance contributions increased by 13.1% (HUF 334.1 billion) compared to the same period of the previous year, also caused by wage increases.

Revenue from EU programmes up to May was HUF 651 billion, HUF 294.3 billion (82.5%) more than in the same period of 2022. In contrast, expenditure on EU programmes amounted to HUF 1,332.3 billion, HUF 368 billion (21.6%) less than the previous year.

Central government expenditure in the first five months of the year was 14.8% higher than in the same period of the previous year.

Among significant expenditure items, expenditure on specific and normative subsidies, housing subsidies, expenditure on public property and interest expenditure were higher than a year earlier.

The amount spent on specific and normative subsidies was HUF 1,158.1 billion higher than at the end of May last year. The most significant item of the increase was HUF 894.6 billion in expenditure to maintain discount household utility prices.

Expenditure on state property increased by HUF 342.9 billion compared to the same period last year. Expenditure on housing subsidies was HUF 95.7 billion higher than in the same period last year, due to the carry-over effect of the end of the home renovation subsidy at the end of last year.

Compared to the first five months of the previous year, expenditure on chapter-administered professional appropriations decreased significantly, by HUF 637.6 billion (21.4%).

In the January-May 2023 period, expenditure on retirement benefits amounted to HUF 2,567.7 billion, up 27% compared to the same period in

2022. During the same period, the Health Insurance Fund spent HUF 1,631.1 billion, an increase of 7.1% compared to the base period. Within this, expenditure on medical and preventive care, which accounts for more than half of the Fund's expenditure, increased by 4.6%.

The balance of interest expenditure and interest income was HUF 514.6 billion (117.4%) more negative at the end of May than in the first five months of 2022.

2.6 Monetary developments

In May, prices increased by 21.5% on average.

In May 2023, consumer prices increased by 21.5% on average, relative to the same period of the previous year. Over the past year, the highest increases were for food (33.5%) and household energy (37.2%), the latter due to changes in household utility discounts. Consumer prices fell by an average of 0.4% in a month, reflecting a strengthening trend towards disinflation. The seasonally adjusted core inflation rate showed a year-on-year increase of 22.8%.

The more significant contributors to the 33.5% average increase in food prices were the 59.6% increase in the consumer prices of other confectionery products, the 51.3% increase in the consumer prices of dairy products and the 52.7% increase in the consumer prices of bread. Butter and butter cream inflation of 46.8%, dry pasta inflation of 37.4% and pastry inflation of 36.6% also exceeded average food inflation for the month. In contrast, pork prices rose at a below-average rate (13.7%), while prices of fresh Hungarian and southern fruit also rose at a below-average rate (22.6%). The main drivers of the 19.3% average inflation in spirits and tobacco were primarily the 37.3% increase in beer prices.

The 17.0% increase in new car prices played a particularly important role in the 8.1% average increase in the prices of consumer durables. The prices of heating and cooking appliances also increased at an above-average rate, by 14.5%, while kitchen and other furniture prices rose by 16.1% compared

to the same period last year. Consumer durables inflation is moderated by a 4.3% increase in the prices of computers, cameras and telephones, and a 0.5% decrease in the prices of televisions. It is also important to highlight the improving trend in second-hand cars: inflation for new and second-hand cars has recently correlated and hovered around 20%, but in May, second-hand cars were only 1.3% less expensive than a year earlier. The increasingly stable forint exchange rate in recent months has played a significant role in this improvement.

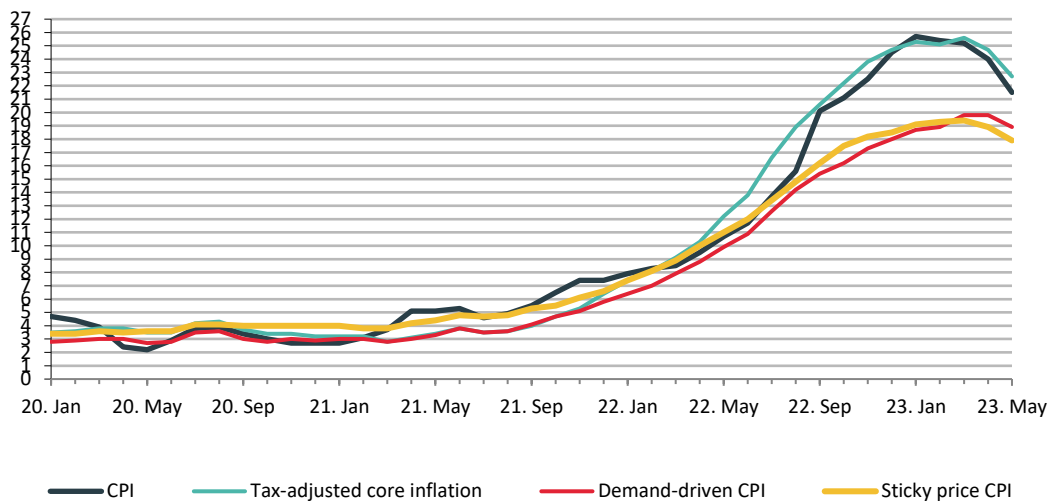
The average increase in household energy prices was 37.2% in May as compared to the same period of the previous year. Within household energy, the price of piped gas increased by 49.1%, electricity by 27.2% and cylinder gas by 47.2% over the past year. Despite the price boom on the world market, the discount household utility prices remained stable until July. From August, they remained the same up to average consumption. Above average consumption, however, consumers have to pay a higher price, which is calculated by the KSH in the billing month. The increase in energy prices will result in an inflation surplus of around 2.5-3% each month, a trend that is expected to continue until September 2023, when the base effect will take effect.

In April, prices of services rose by an average of 14.3%, with vehicle repair and maintenance up 23.1%, tickets to sports events and museums up 27.1% and household equipment repair up 26.2%. Prices of domestic and foreign holidays also increased significantly, by 23.5% on average. The average increase in the price of services was moderated by, among other things, the prices of garbage collection, water and sewerage services remaining unchanged (100.0%) and the introduction of county and country passes, which reduced the price of travel to work and school by 21.7%. In contrast to the other main groups, services have not started to decline in annualised inflation, but rather to increase.

Compared to the previous month, food prices increased by an average of 0.1%, with the largest decreases for cheese (2.3%) and rice (1.7%). The price of services rose by 0.9% month on month, while the price of household

energy fell by 3.0% compared with the previous month, thanks to the mild weather and rationalised consumption.

FIGURE 12: THE EVOLUTION OF INFLATION (ANNUAL CHANGE IN PERCENTAGE)



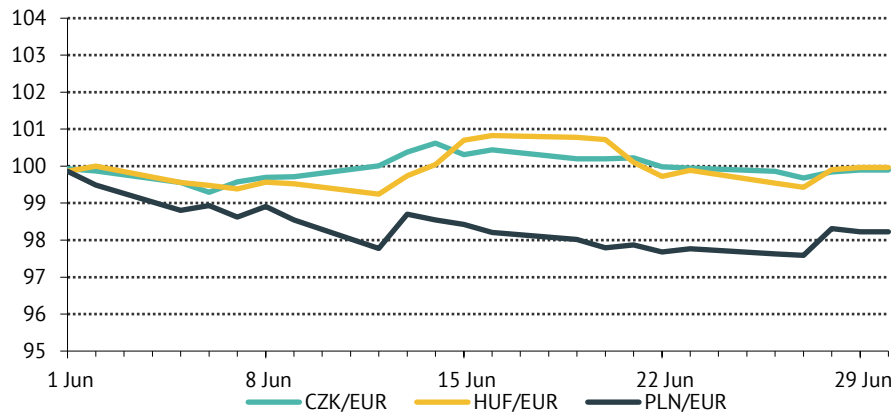
Source: MNB, Századvég

Among the core inflation indicators published by the MNB, in May, the seasonally adjusted core inflation rate was 22.8%, the core inflation rate net of indirect taxes was 22.7%, and the sticky price inflation rate was 17.9%. Core inflation excluding processed food was 18.9% in May 2023.

The Polish zloty strengthened against the euro.

In June, exchange rates in the region showed a mixed picture in relation to the euro. The Czech koruna has remained flat, while the Polish zloty has strengthened by 1.64% against the euro over the period. Government bond yields fell over the period under review: the Czech 10-year government bond yield was 16 basis points lower at 4.3%, while the Polish 10-year yield closed 16 basis points lower at 5.8%.

**FIGURE 13: CHANGES IN EXCHANGE RATES IN THE REGION
(BASELINE VALUE = 100%)**



Source: Refinitiv, Századvég

The Hungarian currency strengthened significantly against the US dollar during

Hungarian money and currency market indicators have been very positive in the recent period, and this was true also in June. Although the HUF minimally weakened against the Euro by 0.1%, it strengthened by 0.55% against the Swiss Franc and by 2.0% against the US Dollar. This means that at the end of June 2023, one euro was worth 371 forints, one US dollar was worth 340 Forints and one Swiss franc was worth 379 forints. Sovereign debt held by foreigners decreased by HUF 598 billion to HUF 6,608 billion in the past month.

At its June meeting, the central bank continued its

At its meeting in June, the Monetary Council of the central bank did not change the base rate (13%) but continued to cut the policy rate. The Monetary Council left the overnight deposit interest rate at 12.5%, but also lowered the upper limit of the interest rate corridor by

100 basis points to 18.5%, together with the policy rate. The central bank's effective interest rate, the overnight deposit facility rate, thus fell to 16.0%. This is the second consecutive month in which the Magyar Nemzeti Bank has made significant changes to monetary conditions since the end of the rate hiking period in October.

In June, government bond market yields for shorter maturities varied between 362 basis points and 234 basis points on the secondary yield curve. This means that the 3-month yield was 10.05%, the 6-month yield was 9.99% and the 1-year yield was 10.46% on 29 June. The 3-year yield fell by 95 basis points to 8.78%. Yields are down 97 basis points over the 5-year horizon, 86 basis points over the 10-year horizon and 45 basis points over the 15-year horizon compared to the previous month. These three yields changed, therefore, to 7.72%, 7.03%, and 6.82%, respectively.

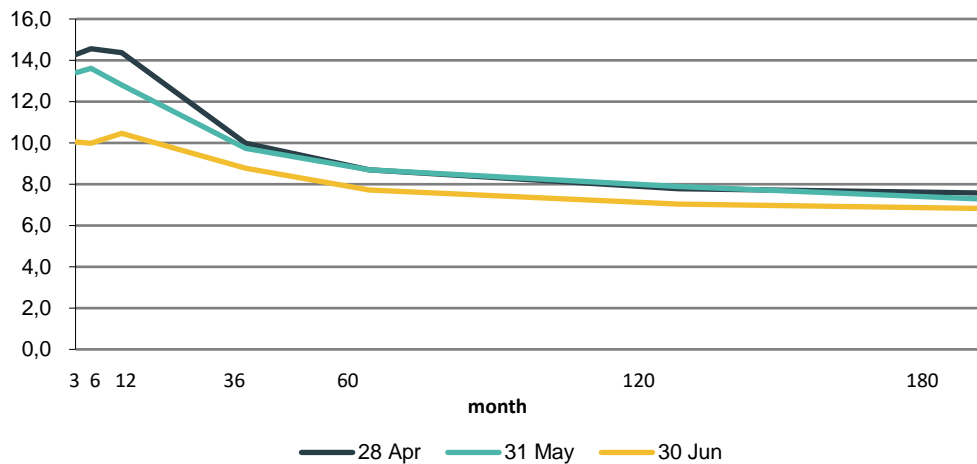
On 31 May 2023, the total value of "MÁP Plusz" government securities held by retail investors was HUF 1,357.4 billion after a HUF 1,077.1 billion decrease from the HUF 2,434.5 billion level at the end of December 2022. The main reason for this is that in a high inflation environment, households prefer to buy discount bonds and the inflation-tracking Premium Hungarian Government Bond (PMÁP), whose cumulative value has risen to HUF 5,654.5 billion, an increase of HUF 1,332.9 billion compared to the end of 2022. In the significantly higher interest rate environment, the total stock of government securities held by households stood at HUF 8,951.0 billion at the end of May 2023, up from HUF 8,619.3 billion at the end of 2022, i.e. HUF 331.7 billion more than in the last month of the previous year.

The share of foreign currency debt in the sovereign debt changed to 25.06% in May (i.e. decreased by 0.07 percentage point), which is in the range (maximum 30%) specified in the financing plan for 2023 of GDMA. In the first five months of 2023, average foreign currency debt averaged 25.62%, down by more than 1.6% compared to the first month of 2023.

At the end of June, Hungary's sovereign debt rating remained at Baa2 with a stable outlook at Moody's, BBB with a negative outlook at S&P and BBB

with a stable outlook at Fitch. Thus, all three major international credit rating agencies have a risk rating for Hungarian treasury securities that is one category above the lowest grade that is still recommended for investment.

FIGURE 14: CHANGES IN THE HUF YIELD CURVE (%)

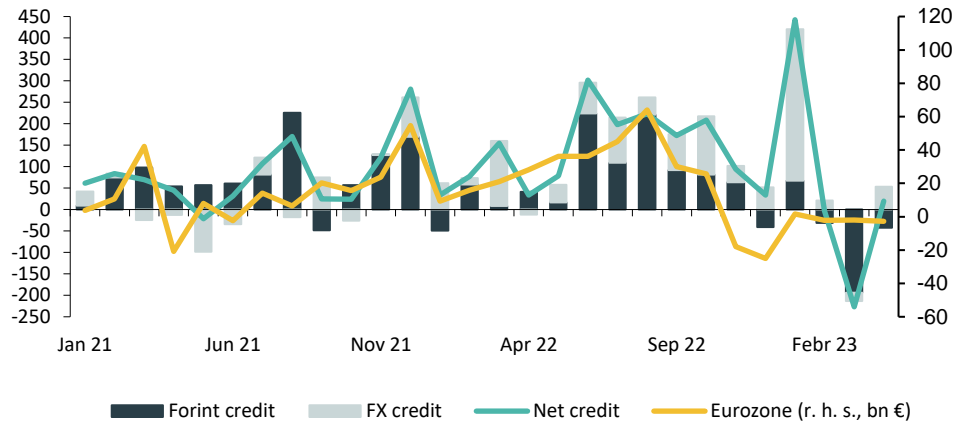


Source: GDMA, Századvég

The stock of foreign currency loans to

Seasonally adjusted data show that the net repayment of HUF loans in the business sector was HUF 42.3 billion in April 2023. In contrast, the aggregated value of net foreign currency loans increased, with borrowing amounting to HUF 53.0 billion in April 2023. Based on seasonally adjusted data, total net borrowing was HUF 19.6 billion in April. Corporate loan repayment in the euro area was EUR 2.7 billion in April 2023.

FIGURE 15: CORPORATE BORROWING (HUF BILLION)



Source: MNB, ECB, Századvég

3. Macroeconomic forecast

Hungarian GDP grew by 4.6% in 2022, while we forecast economic output to grow by 1.1% in 2023, 4.3% in 2024, 3.8% in 2025 and 3.6% in 2026. Our forecast is subject to downside risks such as shrinking retail sales, declining industrial sales orders and a drop in investment due to the current high interest rate environment.

In the global context, a key factor is the negative impact of the sanctions measures imposed as a result of the Russia-Ukraine war, which are affecting gas supplies and making fuel procurement more difficult. In addition, gasoline supply and prices could be negatively affected by OPEC's decision to cut oil production by the end of 2023. **On the positive side, we have seen a recent decline in energy commodity prices, but uncertainties remain about future price developments.**

At the same time, inflation in the European Union and the euro area has risen at a slower rate in recent months. These factors could reduce external inflationary pressures in Hungary. In terms of domestic inflationary developments, inflation is likely to peak in Q1 2023, from which point it could moderate. Therefore, by the end of the year, inflation could reach a level below 10%, estimated at 18.6% on an annual basis. Between 2024 and 2026, inflation is projected at 5.1%, 3.1% and 2.7% respectively.

At its latest interest rate meeting in May, the Magyar Nemzeti Bank also cut the interest rate paid on the required reserves, the interest rate on the O/N collateralised credit facility and the overnight deposit quick tender rate by 100 basis points. The central bank is likely to continue cutting interest rates in the coming months, with the policy rate expected to fall to the base rate by Q4 2023.

Looking at economic trends, we expect the economy to expand at a moderate 1.1% this year. In the early part of the year, a contracting domestic market demand may hold back much of economic expansion, while net exports continue to make a positive contribution to growth. The high inflationary environment and presumably declining real wages could lead to a fall in household consumption, but as inflation moderates towards

the end of the year, we expect consumption to rise. We also expect similar trends in investment, which may also be subdued at the start of the year due to the uncertain economic outlook and the high interest rate environment. In the second half of the year, the slowdown in investment may be tempered by the focus on energy modernisation projects and the start of state-funded military developments. Taking these effects into account, we expect domestic market demand to contract by 2.2% in 2023. With inflation and interest rates moderating, domestic demand is forecast to grow by 4.6% in 2024, followed by increases of 3.3% and 3.6% in 2025 and 2026 respectively.

We forecast a moderate increase in government spending at the beginning of this year, reflecting the fiscal adjustment announced at the end of last year. On an annual basis, government spending growth could reach 1.5% in 2023, 2.1% in 2024, 1.9% in 2025 and 2% in 2026.

In 2023, we expect the ESA general government deficit to reach 3.9% of GDP and the cash deficit to reach 4.3% of GDP, in line with government plans. We expect higher pension expenditure than in the revised budget, but we assess the annual deficit target as sustainable, provided that budgetary reserves are kept. However, VAT receipts and interest expenditure show additional risks which, if they materialise, could push the budget deficit above the statutory target without corrective measures. We forecast that by the end of the year, gross government debt as a share of GDP will fall to 68.5%.

Our deficit forecast of 3.3%, which is higher than in the draft bill for the 2024 budget, is because the draft budget submitted to Parliament does not include the expenditure related to the MNB's loss compensation. The State Audit Office of Hungary estimated that the share of the MNB's expected losses in 2023 to be covered by the 2024 budget year will amount to HUF 430 billion.

Domestic exports grew dynamically in Q1 2023. **Even with external demand continuing to expand, we forecast Hungarian exports to grow by 2.5%, given the high base of the previous year and the persistence of global risks.** In line with the economic growth of external trading

partners, export volumes could increase by 6.9% in 2024, 13.7% in 2025 and 11.8% in 2026.

Imports showed lower growth in Q1. Domestic demand is certainly a key driver for imports, so we expect a steady increase in imports as the end of the year draws near. Overall, we expect Hungarian imports to grow by -0.5% in 2023, 6.8% in 2024, 13.1% in 2025 and 11.7% in 2026.

4. Századvég's forecast²

TABLE 1: 2023 Q2 FORECAST

	2022	2023	2024
Gross domestic product (volume index)	4.6	1.1	4.3
Internal market demand (volume index)	5.1	-2.2	4.6
Export volume index (based on national accounts)	11.8	2.5	6.9
Import volume index (based on national accounts)	11.1	-0.5	6.8
Balance of international trade in goods (EUR billion)	-8.5	-3.7	-3.7
Consumer price index (%)	14.4	18.6	5.1
Central bank base interest rate at the end of the period (%)	13.0	11.7	6.6
Unemployment rate (%)	3.6	4.3	4.6
Current account balance as a percentage of GDP	-8.2	-4.1	-3.3
Net lending as a percentage of the GDP	-6.2	-2.1	-1.3
ESA balance of public finances as a percentage of GDP	-6.2	-3.9	-3.3
Sovereign debt as a percentage of GDP	73.5	68.2	67.1

Source: MNB, Hungarian Central Statistical Office, Századvég's calculation

TABLE 2: QUARTER-ON-QUARTER CHANGE OF OUR FORECAST

	2023			2024		
	03.2023	06.2023	change	03.2023	07.2023	change
Gross domestic product (volume index)	0.6	1.1	0.5	3.4	4.3	0.9
Internal market demand (volume index)	-1.4	-2.2	-0.8	1.6	4.6	3.0
Export volume index (based on national accounts)	1.8	2.5	0.7	4.5	6.9	2.4
Import volume index (based on national accounts)	-1.0	-0.5	0.5	2.6	6.8	4.2
Balance of international trade in goods (EUR billion)	-6.5	-3.7	2.8	-5.5	-3.7	1.8
Consumer price index (%)	17.5	18.6	1.1	4.5	5.1	0.6
Central bank base interest rate at the end of the period (%)	10.7	11.7	1.0	7.8	6.6	-1.2
Unemployment rate (%)	3.9	4.3	0.4	3.6	4.6	1.0
Current account balance as a percentage of GDP	-4.0	-4.1	-0.1	-2.2	-3.3	-1.1
Net lending as a percentage of the GDP	-1.7	-2.1	-0.4	0.0	-1.3	-1.3
Balance of public finances as a percentage of GDP	-3.9	-3.9	0.0	-2.5	-3.3	-0.8
Sovereign debt as a percentage of GDP	69.7	68.2	-1.5	67.6	67.1	-0.5

Source: Századvég's calculation

² Date of preparation: 22 June 2023